#### **Strand 1: Creativity and Innovation**

This strand requires that students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

#### **Concept 1: Knowledge and Ideas**

Use technology to generate knowledge and new ideas.

| Performance Objectives    | Curriculum Connections | Explanations and Examples |
|---------------------------|------------------------|---------------------------|
| No performance objectives |                        |                           |

### **Strand 1: Creativity and Innovation**

#### **Concept 2: Models and Simulations**

Use digital models and simulations to examine real-world connections, explore complex systems and issues, and enhance understanding

| Performance Objectives                             | Curriculum Connections | Explanations and Examples   |
|--|------------------------|---|
| PO 1: Explore and identify models and simulations. |                        | Explanation: Use interactive resources to make observations and analyze a given model or simulation.  Examples: Use digital resources (e.g. Discovery Learning, National Geographic, Animal Planet) to gather information about bears and their habitats. |



### **Strand 1: Creativity and Innovation**

### **Concept 3: Trends and Possibilities**

Use technology to forecast trends and possibilities.

| Performance Objectives    | Curriculum Connections | Explanations and Examples |
|---------------------------|------------------------|---------------------------|
| No performance objectives |                        |                           |



### **Strand 1: Creativity and Innovation**

### **Concept 4: Original Works**

Use technology to create original works in innovative ways.

| Performance Objectives  | Curriculum Connections | Explanations and Examples  |
|---|------------------------|--|
| PO 1: Use digital creativity tools to develop ideas and create a project. |                        | Explanation: Organize ideas, design and produce multimedia projects.  Examples: Students use a computer game (e.g. Scholastic, KidPix, Starfall) the students can build their own dinosaur using body parts from a variety of dinosaurs. |

#### **Strand 2: Communication and Collaboration**

This strand requires students to use digital media and environments to communicate and collaborate with others.

#### **Concept 1: Trends and Possibilities**

Use technology to forecast trends and possibilities.

| Performance Objectives                             | Curriculum Connections | Explanations and Examples   |
|--|------------------------|---|
| PO 1: Identify different methods of communication. |                        | Explanation: communicate with other students and other classes using email or video conferencing.  Examples: Students should understand that effective communication go beyond speaking, writing for example, email, video conferencing and instant messaging, and websites like SKYPE. |

#### **Strand 2: Communication and Collaboration**

### **Concept 2: Digital Solutions**

Contribute to project teams to produce original works or solve problems.

| Performance Objectives        | Curriculum Connections | Explanations and Examples  |
|-------------------------------|------------------------|--|
| PO 1: Identify digital tools. |                        | Explanation: Work with others using technology tools to convey ideas or illustrate simple concepts.  |
|                               |                        | Examples: Share and discuss digital tools such as document computer, cell phones, cameras, digital camera, projector, digital video camera, etc. |

#### **Strand 2: Communication and Collaboration**

#### **Concept 3: Global Connections**

Create cultural understanding and global awareness by interacting with learners of other cultures.

| Performance Objectives                                 | Curriculum Connections | Explanations and Examples  |
|--|------------------------|--|
| PO 1: Explore other cultures through digital resources |                        | Explanation: Use digital resources to explore other cultures.  |
|  |                        | Examples: Participate in online activities from resources, such as, Discovery Learning, Enchanted Learning, and Starfall to explore other cultures. This includes listening to music, reading fables, myths, and folk tales. |

### **Strand 3: Research and Information Literacy**

This strand requires that students apply digital tools to gather, evaluate, and use information.

#### **Concept 1: Planning**

Plan strategies to guide inquiry.

| Performance Objectives                          | Curriculum Connections | Explanations and Examples   |
|---|------------------------|---|
| PO 1: Explore a variety of information sources. |                        | Explanation: Identify different sources of information.   |
|   |                        | Examples:  Participate in a class lesson to identify sources of information, including technology, to answer questions. |

## **Strand 3: Research and Information Literacy**

#### **Concept 2: Processing**

Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

| Performance Objectives  | Curriculum Connections | Explanations and Examples   |
|---|------------------------|---|
| PO 1: Use preselected sources   |                        | Explanation: Teacher will have preselected sources on a specific topic.  Examples:  Use kid friendly search engine such as, ASK for Kids and search for bats.  Use teacher created web quests to search for dinosaur facts using preselected websites such as PBS Kids, Sesame Street.org.  |
| PO 2: Recognize things are real or make-believe.                            |                        |   |
| PO 3: Identify and follow rules regarding the use of information resources. |                        | Explanation: Students should comply with the school district's Acceptable Use Policy (AUP) as well as be able to understand and explain their classroom rules of safe technology use. In addition, occasions may arise where potential dangers in digital environments occur and students should know how to report potentially unsafe situations to their teacher. |

#### Strand 4: Critical Thinking, Problem Solving, Decision Making

This strand requires students to use critical thinking, problem solving, and decision making to manage projects using digital tools and resources.

#### **Concept 1: Investigation**

Identify and define authentic problems and significant questions for investigations.

| Performance Objectives   | Curriculum Connections | Explanations and Examples  |
|--|------------------------|--|
| PO 1: Collaborate to explore<br>an essential question for<br>investigation |                        | Explanation: Build background knowledge and generate questions by using digital content.  Examples: With the guidance of the teacher, record questions for a digital KWL chart using a concept mapping tool such as KidSpiration or interactive whiteboard activities. |



### Strand 4: Critical Thinking, Problem Solving, Decision Making

#### **Concept 2: Exploring Solutions**

Plan and manage activities to develop solutions to answer a question or complete a project.

| Performance Objectives   | Curriculum Connections | Explanations and Examples   |
|--|------------------------|---|
| PO 1: Participate in a learning project using digital planning tools.                  |                        | Explanation: Work together on a project using a digital data tool.  Examples: Participate in a class lesson using technology to explore collecting data.  |
| PO 2: Discuss data collected on a predefined question to explore solutions or results. |                        | Explanation: Students will examine solutions.  Examples: After grouping apples by color the teacher will create chart, pictograph, graph using a digital tool (spreadsheet, painting program, interactive whiteboard activity) and lead a guided discussion on predefined questions such as:  How many red apples? Which color of apples is the least? Which color of apples is the most? |

### Strand 5: Digital Citizenship

This strand requires students to understand human, cultural, and societal issues related to technology practice and ethical behavior.

#### **Concept 1: Safety and Ethics**

Advocate and practice safe, legal, and responsible use of information and technology.

| Performance Objectives  | Curriculum Connections | Explanations and Examples   |
|---|------------------------|---|
| PO 1: Identify use of personal devices and when it is appropriate to use them               |                        | Explanation: Participate in class or small group lessons on when it is appropriate to use technology tools to meet personal needs.  |
| PO 2: Identify and articulate rules for the use of digital tools.                           |                        | Explanation: Students will practice responsible and appropriate use of technology systems, software, and information.   |
| PO 3: Recognize and discuss why there are rules for using technology at home and at school. |                        | Explanation: Practice safe, legal, and responsible use of information and technology.  Examples: Discuss why it may be dangerous to visit certain websites. Also, discuss why there are rules for using technology at home and at school. |

### **Strand 5: Digital Citizenship**

### **Concept 2: Leadership for Digital Citizenship**

Demonstrate leadership for digital citizenship

| Performance Objectives    | Curriculum Connections | Explanations and Examples |
|---------------------------|------------------------|---------------------------|
| No performance objectives |                        |                           |



### **Strand 5: Digital Citizenship**

#### **Concept 3: Impact of Technology**

Develop an understanding of cultural, historical, economic and political impact of technology on individuals and society.

| Performance Objectives   | Curriculum Connections | Explanations and Examples  |
|--|------------------------|--|
| PO 1: Recognize and discuss examples of technology used in daily life. |                        | Explanation: Explain how technology affects the students in their daily life.  |
|  |                        | Examples: Identify examples of technology used in their daily lives such as telephone, microwave, television, cameras, and computer. |



### **Strand 6: Technology Operations and Concepts**

This strand requires students to demonstrate a sound understanding of technology concepts, systems, and operations.

#### **Concept 1: Understanding**

Recognize, define and use technology processes, systems, and applications.

| Performance Objectives  | Curriculum Connections | Explanations and Examples  |
|---|------------------------|--|
| PO 1: Identify basic technology terms   |                        | Explanation: Identify and recognize basic technology terms.  Examples: Use correct vocabulary to describe digital technologies   |
| PO 2: Identify technology process terminology.  |                        | Explanation: Using technology terms on a daily basis within contextual situations is necessary to student understanding.  Examples: Use mouse/pad to access an application.                    |
| PO 3: Identify technology applications for a given activity/project.                        |                        | Explanation: Use specific technology tools for a certain activity.  Examples: Use digital drawing tools to illustrate pages in a ABC book. (e.g., Kidpix, Pixies, MS Paint)                    |
| PO 4: Demonstrate knowledge of electrical safety when using computers and other technology. |                        | Explanation: Students should know that electrical cords and outlets should not be touched.  Examples: Discuss with class that electrical cords and outlets should only be handled by an adult. |



### **Strand 6: Technology Operations and Concepts**

### **Concept 2: Applications**

Select and use applications effectively and productively.

| Performance Objectives  | Curriculum Connections | Explanations and Examples  |
|---|------------------------|--|
| PO 1: Use the mouse/track pad to perform computer functions such as accessing an application, indicating a choice or activating a link. Use the keyboard to type letters and numbers and know how to use special key functions. |                        | Explanation: Be able to use both the mouse and keyboard.  Examples:  Use single click and double click functions of the mouse.  Locate, identify and use letter/number keys.   |
| PO 2: Use technology to identify letters and numbers and differentiate between them.  |                        |  |
| PO 3: Identify and use common navigational elements of a web page.  |                        | Explanation: Be able to navigate a web page.  Examples:  Although typically, pre-k and kindergarten cannot read, many websites, such as Starfall.com and PBS Kids.org uses kidfriendly picture icons to help identify the feature requested and navigate within site.  Use vocabulary such as, web site, web page and home page when navigating thru a site on the World Wide Web. |

### **Strand 6: Technology Operations and Concepts**

#### **Concept 3: Problem Solving**

Define problems and investigate solutions in systems and processes.

| Performance Objectives   | Curriculum Connections | Explanations and Examples  |
|--|------------------------|--|
| PO 1: Understand that there are different types of problems with technology. |                        | Explanation: Be able to recognize different types of problems with technology.       |
|  |                        | Examples: With teacher assistance, verify that cables are connected and power is on. |

### **Strand 6: Technology Operations and Concepts**

### **Concept 4: Transfer of Knowledge**

Transfer current knowledge to learning of new technologies.

| Performance Objectives  | Curriculum Connections | Explanations and Examples   |
|---|------------------------|---|
| PO 1: Demonstrate<br>knowledge of technology<br>used at home. |                        | Explanation: Show an understanding of technology used at home.  Examples: Identify examples of technology used in their daily lives such as, telephone, microwave, television, cameras, and computer. |

